

SKIN CANCER

BACKGROUND

Facts about skin cancer

- Skin cancer is the most preventable type of cancer.
- Skin cancer is the most common of all cancers.
- Melanoma is the deadliest form of skin cancer.
- Everyone is at risk for skin cancer, regardless of skin type or color.
- 1 in every 4 Americans develops skin cancer at some point in his or her life.
- Sun exposure causes at least 90% of all skin cancers.
- 80% of a person's lifetime sun exposure occurs before the age of 18.
- Skin cancer is almost completely curable when treated in its earliest stages.
- **The good news is that almost all skin cancers are preventable by practicing Sun Safety throughout childhood!**

What is skin cancer? What is melanoma?

There are 3 major types of skin cancer: basal cell cancer, squamous cell cancer and melanoma.

- Basal cell cancer accounts for about 80% of all skin cancers. It is slow growing, and usually develops on the head and neck. Once thought of as a disease of older individuals, basal cell cancer has become more common in younger people, primarily due to unprotected exposure to the sun.
- Squamous cell cancer accounts for about 20% of all cancers, and is commonly found on sun-exposed areas of the body such as face, neck, ear, lips, and back of hands. Squamous cell cancer is aggressive and more likely than basal cell cancer to invade other parts of the body.
- Melanoma accounts for 3% of all skin cancers, but causes the majority of skin cancer-related deaths. Melanoma occurs in the cells that produce pigment upon exposure to sunlight. Malignant cells still produce pigment, so melanoma tumors often appear dark. When detected in its early stages, melanoma is almost 100% curable. Melanoma easily spreads throughout the body. When this happens, most cases cannot be cured. Know your ABCDs of malignant melanoma. If you have any doubt about a mole, see your health professional.

What are the signs and symptoms of skin cancer?

The symptoms of melanoma include:

- A new mole.
- Moles that change color, shape or height.
- Moles that itch or are painful.
- Moles that bleed.
- Moles with ABCD features:
 - Asymmetry – one half unlike the other half.
 - Border – irregular-scalloped or poorly circumscribed border.

Color varied from one area to another; shades of tan and brown; black; sometimes white, red or blue.

Diameter larger than 6mm as a rule (diameter of a pencil eraser).

(ABCD warning signs are adapted from the American Academy of Dermatology, 1993)

Skin cancers other than melanoma can look like a variety of marks on the skin, including:

- A new growth that is flat and firm, or pink and shiny.
- A spot or bump that is getting larger.
- A sore that doesn't heal within 2-3 months.
- An area that has visible blood vessels and may be discolored or have a crusted texture.

What are the risk factors for skin cancer?

- Age.
- Repeated sunburns, especially as a child.
- Having a tendency to freckle or sunburn easily.
- Inability to tan.
- Having atypical moles.
- Having a mole that has changed or finding a new mole after the age of 30.
- Having previously had melanoma or a family history of melanoma.

PREVENTION AND SCREENING

How can I reduce my risk of developing skin cancer?

- Limit your time in the sun. Especially try to minimize sun exposure between 10 a.m. and 4 p.m.
- Use a waterproof sunscreen of SPF 15 or higher whenever you're outside, and reapply often – at least once every 2 hours or whenever you come out of the water. Sunscreen should be reapplied after swimming or sweating.
- Wear hats, long-sleeved shirts and long pants to protect the body from the sun.
- Never use tanning booths, tanning parlors or sunlamps.
- Avoid the sun when taking drugs which make your skin more sensitive to light (photosensitive drugs), including antibiotics such as tetracycline, tretinoin (Retin A), sleeping pills and diuretics (water pills).

Screening for skin cancer

- Self exam with a mirror monthly to see if moles, blemishes, freckles, and other marks have changed over time.
- Skin exam by a healthcare professional annually.

What can I do myself?

Perform a self exam. Examine yourself under bright light using a full-length mirror and a hand mirror in order to see your back.

Where can I get screened for melanoma?

Talk to your primary health care provider about skin exams.

DIAGNOSIS AND TREATMENT

This site provides general information that may apply to your specific situation. You may visit the National Cancer Institute's web site www.cancer.gov for the most current cancer information and clinical trials. Once there, you will be able to select from a full range of cancer topics. If you want to speak with a cancer information expert confidentially, you may call 1-800-4CANCER (1-800-422-6237) between 9:00 AM - 4:30 PM.

It is always best to discuss your personal risk for cancer as well as your screening, diagnosis and treatment needs with your health care provider before you commit to a course of action.

How is skin cancer diagnosed?

If you have a suspicious mole or spot, a shave biopsy (a doctor will use a surgical knife to shave off the top layers of the skin) or punch biopsy (an instrument that looks like a cookie cutter is used to punch out a skin piece that contains all layers of the skin) is performed to determine if the skin cells are actually cancerous. This allows the doctor to find out how much more of the area needs to be removed if it is determined to be skin cancer.

If the area is determined to be skin cancer and there are still cancer cells in place, an *excisional biopsy* (in which the mole and a rim of normal tissue around it are cut out) is the usual way to determine if all the skin cancer has been removed from the area. This is performed under local anesthesia in a health care provider's office or as an outpatient. (If melanoma is suspected, the lesion should *not* be burned off.)

How is skin cancer treated?

Melanoma is usually treated by surgical removal of the entire cancerous area, including a border of normal tissue around it. For advanced melanoma, chemotherapy and/or immunotherapy may be used.

Basal and squamous cell cancers are usually treated by scraping and electrodes, freezing, burning, or surgically removing the cancer.

STATISTICS

How many people are diagnosed with skin cancer? How many people die from it?

- State cancer registries such as the Massachusetts Cancer Registry do not collect information on cases of skin cancer other than melanoma because it is so common and so

easily treated. It's estimated that 1 out of every 4 people will be diagnosed with skin cancer at some point in his or her life.

- The American Cancer Society estimates that in 2007 there will be 850,000 new cases of basal cell cancer, 250,000 new cases of squamous cell cancer and 59,940 new cases of melanoma in the United States. The estimated new cases of melanoma for 2007 in Massachusetts are 1,820.
- The American Cancer Society also estimated that in 2007 there will be 1,500 deaths from basal cell and squamous cell cancer and 8,110 deaths from melanoma in the United States. There is no 2007 estimation for deaths from melanoma in Massachusetts.
- The national five-year relative survival rates for 1996-2003 show that 90.0% of males survive five years after diagnosis and 94.1% of females survive five years after diagnosis of melanoma of the skin.
- In Massachusetts between 2000 and 2004, the age-adjusted incidence rates of melanoma in men was 25.2 per 100,000 males and in women was 17.6 per 100,000 females. Men are 1.4 times more likely to develop melanoma than women.
- The age-adjusted mortality rate of melanoma was higher in Massachusetts men (4.3 deaths per 100,000 males) than in Massachusetts women (2.0 deaths per 100,000 females) between 2000 and 2004. Men are 2.1 times more likely to die from melanoma than women.
- The age-adjusted incidence rate of melanoma of the skin for males is 19.4% higher in Massachusetts than nationally and for females is 29.4% higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2000-2004).
- The age-adjusted mortality rate of melanoma of the skin for males is 10.2% higher in Massachusetts than nationally and for females is 17.6% higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2000-2004).

For additional statistics on melanoma in Massachusetts, see Massachusetts Community Health Information Profile (MassCHIP) [Instant Topics – Cancer: Melanoma](http://masschip.state.ma.us/InstantTopics/affiliate.htm). [\[http://masschip.state.ma.us/InstantTopics/affiliate.htm\]](http://masschip.state.ma.us/InstantTopics/affiliate.htm). Please click on an affiliation then find melanoma for the instant topics.

DPH PROGRAMS AND INFORMATION

DPH skin cancer programs

The Massachusetts Department of Public Health is a partner in the **Massachusetts Skin Cancer Prevention Collaborative**. The Collaborative is a statewide coalition committed to promoting the prevention, early detection, and treatment of all types of skin cancer. Established in June 2000, the Collaborative brings together survivors, family members, and representatives from a broad network of organizations, including academic institutions, cancer centers, medical

societies, schools, local public health commissions, businesses, and private foundations. The Collaborative works to raise skin cancer awareness through public education at childcare centers, schools, camps, and recreation programs and professional education.

Publications and Materials

The following reports can be accessed from the Massachusetts Cancer Registry website at <http://www.mass.gov/dph/bhsre/mcr/canreg.htm>

- Statewide Reports: *Cancer Incidence and Mortality in Massachusetts – Statewide Report 2000-2004*
- City and Town Series: *Cancer Incidence in Massachusetts – City and Town Supplement 2000-2004*
- Special Reports: *Melanoma in Massachusetts, 1982-2002: Data Report*

Pamphlets, Brochures and Videos

The following materials are available through the Massachusetts Health Promotion Clearinghouse, telephone 1-800-952-6637, website www.maclearinghouse.com:

- Ban the Burn Tip Sheet: General/Parents (*available in English, Portuguese, and Spanish*)
- Ban the Burn Tip Sheet: Newborns (*available in English, Portuguese, and Spanish*)
- Ban the Burn Tip Sheet: Preschool Children (*available in English, Portuguese, and Spanish*)
- Ban the Burn Poster (*available in English*)
- It's Never Too Late to Protect Yourself from Skin Cancer (*tip sheet for adults age 50 and older, available in English*)
- Have a Changing Mole? (*poster, available in English*)
- Have a Changing Mole? (*laminated tip card for health care professionals, available in English*)

The following materials can be downloaded from the internet:

- Brochure – [The Sun, UV, and You](#) (Environmental Protection Agency has published a number of documents to help you be SunWise)

Educational Resources

The following materials can be downloaded from the internet:

- Sun Safety - [National Safety Council](#)
- Guide – California Early Childhood Sun Protection Curriculum (for preschool children and their parents; from the [California Department of Health Services](#); 36 pages)
 - [Preschool Sun Safety Education Package - California Early Childhood Sun Protection Curriculum](#)

RELATED LINKS

Background/General Links

American Academy of Dermatology (AAD)

- [ABCDs of Melanoma Detection](#)
- [Malignant Melanoma Fact Sheet](#)
- [What is Skin Cancer?](#)

- [What Skin Cancer Looks Like](#)

American Cancer Society (ACS)

- [Cancer Reference Information: All About Skin Cancer – Melanoma](#)
- [Cancer Reference Information: All About Skin Cancer – Nonmelanoma](#)

Harvard Center for Cancer Prevention

- [Your Disease Risk: Cancer - Melanoma](#)

National Cancer Institute (NCI)

- [Melanoma](#)
- [Skin Cancer](#)
- [What You Need To Know About Melanoma](#)
- [What You Need To Know About Skin Cancer](#)

Prevention and Screening Links

American Academy of Dermatology (AAD)

- [Skin Cancer Screening](#)

Centers for Disease Control and Prevention (CDC)

- [CDC Activities to Promote Skin Cancer Prevention and Education](#)
- [Skin Cancer Primary Prevention and Education Initiative](#)

Environmental Protection Agency (EPA)

- [SunWise School Program](#)

National Cancer Institute (NCI)

- [Skin Cancer \(PDQ\): Prevention](#)
- [Skin Cancer \(PDQ\): Screening](#)

Diagnosis and Treatment Links

American Cancer Society (ACS)

- [NexProfiler Treatment Option Tool for Melanoma](#)

National Cancer Institute (NCI)

- [Clinical Trials](#)
- [Melanoma \(PDQ\): Treatment](#)
- [Skin Cancer \(PDQ\): Treatment](#)

Statistics Links

American Cancer Society (ACS)

- [Statistics](#)

Centers for Disease Control and Prevention and National Cancer Institute

- [United States Cancer Statistics](#)

National Cancer Institute (NCI)

- [Surveillance, Epidemiology and End Results \(SEER\) Cancer Statistics Review, 1975-2003](#)

North American Association of Central Cancer Registries (NAACCR)

- [Statistics & Reports](#)